HP ProLiant ML370 Generation 4 Server Cabling Matrix

This matrix provides information on cables required to connect internal and external SCSI options.

The ML370 G4 includes a single SCSI cable for the connection of the system hard drives. To use a second SCSI channel for tape backup, drive duplexing, connection of the two-bay drive cage, or connection of external SCSI devices; a second SCSI cable is required.
This second cable is often contained in the kit for the option. Use this matrix to identify any additional cables that may be required.

Option	SCSI Connector on the Option	Cable Type Included with the Option	Supported HBAs/Controllers	Additional Cables Required
Internal Hot Plug Hard Drives and Tape Drives				
Ultra320 Hot-Plug Hard Drives DAT40 Hot-Plug DAT72 Hot-Plug	SCSI	No SCSI cable included with the option	*The hot plug drive cage can be connected to one of the following:* Ultra320 Integrated SCSI Controller (on server system board) Smart Array 641, 642, 6402, or 6404 64-Bit/133-MHz Dual Channel Ultra320 (P/N 268351-B21) 64-Bit/66-MHz Dual Channel Wide Ultra 3 (P/N 284688-B21)	No additional cables required
Serial Attached SCSI (SAS)/ATA (SATA) - 2.5 inch only	SAS	No SAS/SATA cable included with the option	Smart Array p600 (337972-B21)	included with SAS models and drive cages
Internal Tape				
DAT 24i**	LVD Narrow 50-pin	50-to-68 pin adapter and HD68-HD68 cable	64-Bit/133-MHz Dual Channel Ultra320 (P/N 268351-B21) 64-Bit/66-MHz Dual Channel Wide Ultra 3 (P/N 284688-B21) **DAT 24i not supported with embedded HBA	No additional cables required
DAT 40i DAT 72i Ultrium 215i Ultrium 230i Ultrium 460i DLT VS 80i SDLT 320i	LVD wide 68-pin	HD68-HD68	Ultra320 Integrated SCSI Controller (on server system board) 64-Bit/133-MHz Dual Channel Ultra320 (P/N 268351-B21) 64-Bit/66-MHz Dual Channel Wide Ultra 3 (P/N 284688-B21)	No additional cables required
DAT 40 USB DAT 72 USB	USB 2.0	USB 2.0	Plugs into system board; for the location of the connector, refer to documents or label under the cover	No additional cables required
External Direct Attach Storage				
MSA 20	VHDCI	VHDCI-VHDCI 3 ft	Smart Array 6402 and 6404 64-Bit/133-MHz Dual Channel Ultra320 (P/N 268351-B21) 64-Bit/66-MHz Dual Channel Wide Ultra 3 (P/N 284688-B21)	No additional cables required
MSA 30	VHDCI	VHDCI-VHDCI 6 ft	Ultra320 Integrated SCSI Controller (on server system board)	Order the VHDCI internal-to-external kit (P/N 333370-B21)
			Smart Array 641 , 642, 6402, and 6404 64-Bit/133-MHz Dual Channel Ultra320 (P/N 268351-B21) 64-Bit/66-MHz Dual Channel Wide Ultra 3 (P/N 284688-B21)	No additional cables required
MSA 50	SAS (8470)	2 m external SAS	Smart Array p600 (337972-B21)	No additional cables required
MSA 500 G2	VHDCI	VHDCI-VHDCI 6ft	Smart Array 642	No additional cables required
MSA 1000	2x VHDCI	No SCSI or fibre cable included	FCA2214 Host Adapter (Linux & 32-bit Windows) (P/N 281541-B21) FCA2214DC dual channel Host Adapter (Linux & 32-bit Windows) (P/N 321835-B21) FCA2210 Host Adapter (NetWare) (P/N 281540-B21) FCA2404 Host Adapter PCI-X (32-bit Windows) (P/N 305573-B21) FCA2404DC dual channel Host Adapter PCI-X (32-bit Windows) (P/N 323264-B21)	2 m LC-LC Multi-Mode Fibre Channel Cable (P/N 221692-B21) 5 m LC-LC Multi-Mode Fibre Channel Cable (P/N 221692-B22) 15 m LC-LC Multi-Mode Fibre Channel Cable (P/N 221692-B23) 30 m LC-LC Multi-Mode Fibre Channel Cable (P/N 221692-B26) 50 m LC-LC Multi-Mode Fibre Channel Cable (P/N 221692-B27)
MSA 1500	2x VHDCI (supports either one SCSI channel or two SATA)	No SCSI or fibre cable included	FCA2214 Host Adapter (32-bit Windows) (P/N 281541-B21) FCA2214DC dual channel Host Adapter (32-bit Windows) (P/N 321835-B21) FCA2404 Host Adapter PCI-X (32-bit Windows) (P/N 305573-B21) FCA2404DC dual channel Host Adapter PCI-X (32-bit Windows) (P/N 323264-B21)	2 m LC-LC Multi-Mode Fibre Channel Cable (P/N 221692-B21) 5 m LC-LC Multi-Mode Fibre Channel Cable (P/N 221692-B22) 15 m LC-LC Multi-Mode Fibre Channel Cable (P/N 221692-B23) 30 m LC-LC Multi-Mode Fibre Channel Cable (P/N 221692-B26) 50 m LC-LC Multi-Mode Fibre Channel Cable (P/N 221692-B27)

Option	SCSI Connector on the Option	Cable Type Included with the Option	Supported HBAs/Controllers	Additional Cables Required
External Tape and Optical Storage				
DAT 24e	LVD Narrow 50-pin	50-to-68 pin adapter and HD68-HD68 cable	64-Bit/133-MHz Dual Channel Ultra320 (P/N 268351-B21) 64-Bit/66-MHz Dual Channel Wide Ultra 3 (P/N 284688-B21) **DAT 24i not supported with the embedded HBA	No additional cables required
DAT 40e DAT 72e Ultrium 215e Ultrium 230e Ultrium 460e DLT VS 80e SDLT 320e SDLT 600e	LVD Wide 68-pin	HD68-VHDCI	Ultra320 Integrated SCSI Controller (on server system board)	Order the VHDCI internal-to-external kit (P/N 333370-B21)
			64-Bit/133-MHz Dual Channel Ultra320 (P/N 268351-B21) 64-Bit/66-MHz Dual Channel Wide Ultra 3 (P/N 284688-B21)	No additional cables required
DAT 40 USB DAT 72 USB	USB 2.0	USB 2.0	Plugs into front or rear external connectors.	No additional cables required
External Tape Autoloaders				
1/8 Ultrium 230 1/8 Ultrium 460 1/8 DLT VS 80 SSL1016 Ultrium 230 SSL1016 Ultrium 460 SSL1016 DLT1 DAT 40x6 DAT 72x6	LVD Wide 68-pin	HD68-VHDCI 1.5m	Ultra320 Integrated SCSI Controller (on server system board)	Order the VHDCI internal-to-external kit (P/N 333370-B21)
			64-Bit/133-MHz Dual Channel Ultra320 (P/N 268351-B21) 64-Bit/66-MHz Dual Channel Wide Ultra 3 (P/N 284688-B21)	No additional cables required
External Tape Libraries				
MSL6030 MSL6060 MSL5026S2 MSL5052S2 MSL5030	VHDCI	No SCSI cable included	Ultra320 Integrated SCSI Controller (on server system board)	Order the VHDCI internal-to-external kit (P/N 333370-B21) and one of the following VHDCI-VHDCI cables: VHDCI-VHDCI cable. 6 ft (P/N 341174-B21) VHDCI-VHDCI cable. 12 ft (P/N 341175-B21)
MSL5060 ESL9595 ESL9000			64-Bit/133-MHz Dual Channel Ultra320 (P/N 268351-B21) 64-Bit/66-MHz Dual Channel Wide Ultra 3 (P/N 284688-B21)	Order one of the following VHDCI-VHDCI cables: VHDCI-VHDCI cable. 6 ft (P/N 341174-B21) VHDCI-VHDCI cable. 12 ft (P/N 341175-B21)
Optical Jukeboxes				
300mx 600mx 700mx 1200mx 2200mx	LVD Wide 68-pin	No SCSI cable included	Ultra320 Integrated SCSI Controller (on server system board)	Order the VHDCI internal to external kit (P/N 333370-B21) and one of the following VHDCI-VHDCI cables: VHDCI-VHDCI cable. 6 ft (P/N 341174-B21) VHDCI-VHDCI cable. 12 ft (P/N 341175-B21)
			64-Bit/66-MHz Dual Channel Wide Ultra 3 (P/N 284688-B21)	Order one of the following HD68-VHDCI cables: VHDCI-HD68 cable. 6 ft (P/N 341176-B21) VHDCI-HD68 cable. 12 ft (P/N 341177-B21) VHDCI-HD68 cable. 10 mm (P/N 201160-B21)

NOTE: The information in this matrix lists whether or not additional cables need to be purchased with each controller-to-option configuration. For information on ho to cable an option, refer to the *HP ProLiant ML370 Generation 4 Reference and Troubleshooting Guide* and the device-specific documentation. For information on the specific options supported by the server, refer to the server and device QuickSpecs.

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